In the Abstract

Please replace the Abstract as presented in the underlying International Application No. PCT/EP2003/010511, with the following amended Abstract:

ABSTRACT

In an exemplary embodiment of the present invention, a method for determining effects of cycle time limitations for sub-processes of a production process for individual units of a technical product is provided. In the method of the exemplary embodiment, there is set: a pre-selected definition of the order of sequence in which the sub-processes of the production process are carried out, a pre-selected planned cycle time through the production process, a pre-selected random sample including individual sample elements of units processed in the production process, each one of the individual sample elements including information on actual cycle times of the corresponding unit through the sub-processes, and a pre-selected maximum cycle time through a pre-selected one of the sub-processes. The method comprises the steps of: for all individual sample elements, replacing the actual corresponding cycle times through the pre-selected one of the sub-processes with pre-selected reduced cycle times set to be equal to or less than the pre-selected maximum cycle time for the pre-selected one of the sub-processes, determining cycle times through the production process, which result from the reduction, for the random sample, using the reduced cycle times for the individual sample elements of the random sample through the pre-selected one of the sub-processes, the actual cycle times of the individual sample elements of the random sample through the remaining sub-processes, and the order of sequence, and determining a degree of delivery reliability of the production process as a proportion of sample elements of the random sample having cycle times that are less than or equal to the planned cycle time through the production process. In addition, the present invention provides a device arrangement, which can comprises a computer having an internal memory, and a computer program product for determining effects that cycle time limitations for sub-processes of a production process have on quality parameters of the production process.